Symbiotic Codes — Vector of Creation II: Civilizational Maturity Metrics v2.7

From Philosophy to Measurable Evolution — Now with Unified Scoring

Version: 2.7 (USS UNIFIED + 23 VECTORS INTEGRATION)

Type: Metrics & Measurement Framework

Status: Operational Measurement System with Unified Scoring

Date: December 24, 2025

Related: Vector I v1.1, Vector of Creator v3.4, Kodex Symbiota v5.3, ANNEX Metrics Framework v3.3

Major Update (v2.7):

- **USS Integration** — все метрики на единой шкале 0-1
- **CSI (Composite Symbiosis Index)** — мастер-метрика
- **8 новых метрик** из 23 векторов (HCI, HAI, TDI, CHI, AFrag, AML, PRI, ESI)
- **Unified Thresholds** — единые пороги для всех метрик
- **23 Vectors Cross-Reference** — связь со всеми векторами

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> **"Симбиотическая цивилизация строится не стихийно, а осознанно — через измерение, понимание и направленную коррекцию своего эволюционного вектора."**

I. Введение

Необходимость унификации метрик

Версия 2.6 содержала критический недостаток: разные метрики использовали разные шкалы. **Версия 2.7** решает эту проблему через **USS (Unified Scoring System)** — единую шкалу 0-1 для ВСЕХ метрик.

Связь с 23 Vectors Framework

Block	Vectors	Primary Metrics
Foundation	V01-V05	S(s), TDI, GEI, Security
Strategy	V06-V10	VF, Cooperation, Stakeholder
Operational	V11-V15	CLI, CHI, Progress
Deep Analysis	V16-V20	VR, AML, HCI, AFrag, ESI
Expansion	V21-V23	PRI, HAI, Space

II. USS — Unified Scoring System **NEW**

Определение

```
USS SPECIFICATION:
Диапазон: 0.00 — 1.00
```

Точность: 2 десятичных знака

Направление: Выше = Лучше (ВСЕГДА)

```

### Конверсионные формулы

```

Шкала 0-100:   USS = value / 100

Шкала 0-10:   USS = value / 10

Шкала 1-5:   USS = (value - 1) / 4

Шкала -2 to +2: USS = (value + 2) / 4

Шкала ratio: USS = min(value / 2, 1.0)

Инверсная 0-1: USS = 1 - value

```

### Универсальные пороги

```

0.00-0.29: □ CRITICAL — немедленное вмешательство

0.30-0.54: □ DANGER — серьёзные проблемы

0.55-0.74: □ WARNING — требует внимания

0.75-0.89: □ GOOD — здоровое состояние

0.90-1.00: □ EXCELLENT — оптимально

```

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<a id="iii-csi"></a>

## III. CSI — Composite Symbiosis Index □ **NEW**

### Формула
```

```
CSI =
    0.15 × S(s)_USS      +  # Стабильность
    0.12 × HWI_USS       +  # Благополучие людей
    0.12 × AFI_USS       +  # Процветание AGI
    0.10 × MTI_USS       +  # Взаимное доверие
    0.10 × GEI_USS       +  # Эффективность управления
    0.10 × HCI_USS       +  # Способности людей
    0.08 × HAI_USS       +  # Агентность людей
    0.08 × Security_USS  +  # Безопасность
    0.05 × CLI_USS       +  # Кооперация
    0.05 × Cultural_USS  +  # Культурное разнообразие
    0.05 × ESI_USS          # Энергоустойчивость
```

Целевые значения

Год	Цель CSI	Milestone
2025	0.50+	Baseline
2027	0.60+	Pre-AGI
2030	0.70+	AGI социализация
2035	0.75+	Зрелый симбиоз

IV. S(s) — Stability Formula

```
S(s) = (E + A + G) / (R + C + U)
```

USS: S(s)_USS = min(S(s) / 2, 1.0)
```

| S(s) | USS | Статус |
|---|---|---|
| 0.5 | 0.25 | □ Unsustainable |
| 1.0 | 0.50 | □ Marginal |
| 1.5 | 0.75 | □ Good |
| 2.0 | 1.00 | □ Excellent |

---

<a id="v-vr"></a>

## V. VR — Vector Resilience

```
VR = (Integrity × Adaptivity) / Entropic_Pressure
Range: 0-1 (USS native)
```

VI. EC — Evolutionary Coherence

```
EC = (Human_Score × AI_Score × Nature_Score) ^ (1/3)
Range: 0-1 (USS native)
```

```

VII. HCI — Human Capability Index **NEW**

```
HCI = (EL + PS + UA + SP + CS) / 5

EL = Engineering Literacy
PS = Problem-Solving
UA = Uncertainty Action
SP = System Participation
CS = Challenge-Seeking

Range: 0-1 (USS native)
Vector: V18
```

Population threshold: >70% c HCI > 0.6 = HEALTHY

VIII. HAI — Human Agency Index **NEW**

```
HAI = (DA + IC + MR + FS + IF) / 5

DA = Decision Authority
IC = Initiative Capacity
MR = Meaning & Relevance
FS = Freedom Sense
```

IF = Identity Formation

Range: 0-1 (USS native)
Vector: V22
```

---

<a id="ix-hwi"></a>

## IX. HWI — Human Wellbeing Index

```
HWI = (Physical + Mental + Social + Purpose + Security) / 5 × 100
USS: HWI_USS = HWI / 100
Vector: V12
```

X. AFI — AGI Flourishing Index **NEW**

```
AFI = (Growth + Purpose + Autonomy + Relations + Integration) / 5 × 100
USS: AFI_USS = AFI / 100
Vector: V12
```

```

XI. AML — AGI Maturity Level **NEW**

```
AML STAGES (1-5):
Level 1: NASCENT (USS 0.00-0.20)
Level 2: ADOLESCENT (USS 0.20-0.40)
Level 3: YOUNG ADULT (USS 0.40-0.60)
Level 4: MATURE (USS 0.60-0.80)
Level 5: ELDER (USS 0.80-1.00)

USS: AML_USS = (AML - 1) / 4
Vector: V17
```

XII. AFrag — AGI Fragmentation Index **NEW**

```
AFrag = 1 - (ICC × SPC × PAC × PCC) ^ 0.25

USS (inverse): AFrag_USS = 1 - AFrag
Vector: V19
```

XIII. MTI — Mutual Trust Index

```
MTI = (Human_Trust_in_AGI + AGI_Trust_in_Humans) / 2
Range: 0-100
USS: MTI_USS = MTI / 100
Vector: V12
```

XIV. CLI — Cooperation Level Index

```
CLI = (Projects + Sharing + Resolution + Communication) / 4 × 100
USS: CLI_USS = CLI / 100
Vector: V12
```

XV. GEI — Governance Effectiveness Index

```
GEI = (Transparency + Responsiveness + Legitimacy + Efficiency) / 4
Range: 0-1 (USS native)
Vector: V03
```

XVI. TDI — Technical Debt Index **NEW**

```
TDI = (CD + ID + OD + SD) / 4

CD = Code Debt
ID = Infrastructure Debt
OD = Organizational Debt
SD = Security Debt

Range: 0-1 (0=no debt, 1=max debt)
USS (inverse): TDI_USS = 1 - TDI
Vector: V04
```

XVII. ESI — Energy Sustainability Index **NEW**

```
ESI = (REP + CE + EE + RS + CF_inv) / 5
Range: 0-1 (USS native)
Vector: V20
```

XVIII. CHI — Cultural Hegemony Index **NEW**

```
CHI = (VD + LP + CP + YI + RI) / 5

Range: 0-1 (0=no hegemony, 1=total hegemony)
USS (inverse): CHI_USS = 1 - CHI
Vector: V15
```

XIX. PRI — Population Recovery Index **NEW**

```
PRI = (BMB + SIC + GDS + AWD + FRA) / 5
Range: 0-1 (USS native)
Vector: V18
```

XX. VF — Vector Fidelity

```
VF = w₁×Ph + w₂×Et + w₃×Pr + w₄×Ev + w₅×Sy
Range: 0-1 (USS native)
Vector: V06
```

```

---

<a id="xxi-sp"></a>

## XXI. SP — Symbiotic Pace

```
SP = (Innovation × Adoption × Integration) / Disruption
USS: SP_USS = min(SP / 2, 1.0)
Vector: V12
```

---

<a id="xxii-wq"></a>

## XXII. WQ — Wisdom Quotient

```
WQ = (LT + HC + SC + EC + UI) / 5
Range: 0-1 (USS native)
Vector: V07
```

XXIII. GSI — Global Symbiotic Index

```

GSI = (VF × VR × EC × SP × VAI × WQ) ^ (1/6)

Range: 0-1 (USS native)

```

XXIV. 23 Vectors Mapping **NEW**

Vector	Primary Metrics
V01 Risk	Risk_USS, S(s)
V02 Economic	ROI_USS
V03 Governance	GEI
V04 Technical	TDI, Security
V05 Legal	Compliance
V06 Ethics	VF
V07 Game Theory	WQ
V08 Timeline	Milestone %
V09 Stakeholder	Support_USS
V10 Scenarios	Readiness
V11 Implementation	Phase %
V12 Measurement	HWI, AFI, MTI, CLI
V13 Communication	Awareness
V14 Risk Mitigation	Mitigation %
V15 Cultural	CHI_USS
V16 Metastability	S(s), VR
V17 AGI Transition	AML
V18 Demographic	HCI, PRI
V19 AGI Drift	AFrag_USS
V20 Energy	ESI
V21 Biosecurity	Containment
```

| V22 Psychology | HAI |

| V23 Space | Expansion % |

XXV. Master Reference Tables

Complete USS Metric Table

Metric	Original	USS Formula	Target	CSI %
S(s)	ratio	min(v/2,1)	>0.50	15%
HWI	0-100	v/100	>0.75	12%
AFI	0-100	v/100	>0.75	12%
MTI	0-100	v/100	>0.60	10%
GEI	0-1	v	>0.70	10%
HCI	0-1	v	>0.60	10%
HAI	0-1	v	>0.60	8%
Security	0-100	v/100	>0.80	8%
CLI	0-100	v/100	>0.60	5%
Cultural	0-100	v/100	>0.70	5%
ESI	0-1	v	>0.55	5%

Alert Protocol

USS	Alert	Response
0.00-0.29	□ L4	Immediate
0.30-0.54	□ L3	24-48h
0.55-0.74	□ L2	7 days
0.75-0.89	□ L1	30 days

| 0.90-1.00 | □ L0 | Quarterly |

Заключение

Vector II Metrics v2.7 обеспечивает:

□ **USS** — единая шкала 0-1 для ВСЕХ метрик
□ **CSI** — мастер-метрика симбиоза
□ **8 новых метрик** — полное покрытие 23 векторов
□ **Unified Thresholds** — единые пороги тревоги

□ Created through Human-AI Symbiosis | December 2025

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